

Title (en)

BURIED PIPE LIFTING DEVICE AND METHOD

Title (de)

VORRICHTUNG UND VERFAHREN ZUM ANHEBEN ERDVERLEGTER ROHRE

Title (fr)

DISPOSITIF ET PROCÉDÉ DE LEVAGE DE TUYAU ENFOU

Publication

**EP 3717706 A4 20210714 (EN)**

Application

**EP 18883037 A 20181106**

Priority

- US 201715824185 A 20171128
- US 2018059443 W 20181106

Abstract (en)

[origin: US2019162353A1] A method for in situ relocation of an underground utility including the steps of inserting, extending, raising and continuing to raise. The inserting step is carried out by the inserting of at least one lifting member down into the ground alongside the underground utility. The extending step extends a lifting bracket from the at least one lifting member. The raising step raises the lifting member causing the lifting bracket to engage a portion of the underground utility. The continuing step continues to raise the lifting member until the underground utility reaches a predetermined position.

IPC 8 full level

**E02D 29/00** (2006.01); **B66F 7/04** (2006.01); **F16L 1/028** (2006.01)

CPC (source: EP US)

**B66F 1/00** (2013.01 - EP US); **E02F 5/00** (2013.01 - US); **F16L 1/028** (2013.01 - EP US); **F16L 1/036** (2013.01 - US);  
**F16L 1/06** (2013.01 - EP US); **F16L 55/18** (2013.01 - US); **E02F 5/003** (2013.01 - EP)

Citation (search report)

- [A] WO 2014091474 A1 20140619 - KLINE SHLOMO [IL]
- [A] DE 102016103534 A1 20170831 - NATURSPEICHER GMBH [DE]
- [A] US 4028903 A 19770614 - DIETRICH DAVE S
- See references of WO 2019108345A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 10408375 B2 20190910; US 2019162353 A1 20190530;** DK 3717706 T3 20221024; EP 3717706 A1 20201007; EP 3717706 A4 20210714;  
EP 3717706 B1 20220720; PL 3717706 T3 20221114; WO 2019108345 A1 20190606

DOCDB simple family (application)

**US 201715824185 A 20171128;** DK 18883037 T 20181106; EP 18883037 A 20181106; PL 18883037 T 20181106; US 2018059443 W 20181106